Mediawatch

Mad minister disease?

Bernard Dixon

Nearly ten years ago, a hitherto unknown neurological condition, bovine spongiform encephalopathy (BSE), appeared in British cows. It was labelled 'mad cow disease', because of the strange combination of fear and shambling gait shown by its victims. As more cases came to light, BSE was found to be similar to scrapie in sheep and it was suggested that cows were infected by eating feedstuffs containing protein from sheep with scrapie. There was also concern about a human condition akin to scrapie: Creutzfeldt–Jakob disease (CJD). Although CJD encephalopathy is rare, the number of reported cases has been increasing (possibly because of improved diagnosis). Could CJD be caused by the agent of BSE, crossing the species barrier from cows to humans? Is beef safe to eat?

These questions have resurfaced many times in Britain, and elsewhere too — especially in Germany, which sought to ban UK beef imports in 1990. Meanwhile, the conundrum of BSE and its relationship with CJD has become even more complex. The media have sometimes been blamed for heightening the confusion, but a dispassionate analysis of their coverage shows that they have, for the most part, handled an unusually challenging subject rather well. Certain politicians emerge with considerably less credit for their contributions to public understanding and debate.

The UK government took three early measures to combat BSE. It proscribed the feeding of ruminant protein to ruminants, including cattle and sheep; established a programme to slaughter cattle suspected of having the disease; and banned the use in human food of any tissues (such as brain and spinal cord) that might contain the BSE agent. These were prudent precautions which almost certainly explain why the number of cases of BSE, having risen from 12 in 1986 to 36 924 in 1992, fell to 22 699 in 1994 and around 13 000 in 1995.

The government's actions also engendered public confidence. But that was harmed when Food and Agriculture Minister John Gummer appeared on television in May 1990, trying to force his young daughter (who refused) to eat a beefburger. The spectacle was risible and widely ridiculed. Around this time, some experts expressed concern that the media were unhelpful in reporting allegations by other scientists that official efforts to limit the BSE problem were inadequate. One argument was that not only bovine spinal cord but also the vertebral column should be removed from human food. This was indeed later considered necessary: it is precisely what Gummer's successor, Douglas Hogg, announced when he tightened BSE controls in December 1995.

More generally, the UK media have been criticized for exaggerating the risk that CJD in humans is linked to BSE in cattle. In fact, most have reflected the honest professional disagreements that exist among virologists regarding this danger and the likelihood that each condition is caused by a protein particle termed a prion, and perhaps by the same prion. Several newspapers have devoted unusually large amounts of space to explain the nature of, and deficiencies in, the evidence.

One example arose last October, when *The Lancet* published accounts of two British teenagers who had developed CJD. Because only four cases had been reported previously in this age group, the authors discussed a conjectural link with BSE. Their speculations could have attracted sensational headlines, but they did not. The lay media mostly covered the cases accurately and responsibly. Some went further, exploring the inherently complex issue of how researchers seek to establish a causal link between coincident phenomena, especially when dealing with infectious diseases with very long incubation times.

There has also been considerable media coverage of the problem of discerning, from the decline in BSE following the government's control measures, whether those actions have been adequate and the disease can be expected to disappear completely. When the *British Medical Journal*, last November, printed seven partially contradictory expert opinions on the relationship of CJD to BSE, these too were fairly mirrored in press coverage.

Criticism of the media for misrepresenting scientific developments is sometimes justified. On other occasions, complainants should consider whether their grievance is really against journalists or against claims and ideas, accurately reported, with which they disagree. In the case of UK coverage of BSE, the media in general have done a fine job. Faced with the alarming possibility of a nationwide epidemic of a distressing and potentially fatal brain disease among beef eaters, reporters have behaved responsibly and with restraint. The vast majority have covered a complex, ever-changing story competently, and have handled the uncertainties with commendable prudence.

And the politicians? They are still behaving with disarming simplicity. Health Secretary Stephen Dorrell, for example, speaking shortly after the *BMJ*'s explicit demonstration of expert disagreements last November, stated that there was 'no conceivable risk' of BSE being transmitted from cows to people. This was not what the real experts — even the government's own advisors — were saying. It was a feckless remark, made doubly conspicuous by the careful manner in which the media (on this occasion) have handled a biomedical scenario with enormous social implications.

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